

NAME OF PROPERTY **BANNOCKBURN, SUPERIOR**

OBJECT LOCATED - West corner of Silver Bottom claim (Lot 4451).

UNCERTAINTY IN METRES 200. Lat. 50°38'30" Long. 117°09'35"

Mining Division	<b>Slocan</b>	District
County		Township or Parish
Lot		Concession or Range
Sec	Tp.	R.

OWNER OR OPERATOR AND ADDRESS

DESCRIPTION OF DEPOSIT

The property is underlain by Late Precambrian sediments of the Hamill Series and Badshot Formation.

"The showings are in quartzite and limestone near the top of the Hamill group of rocks, a thick quartzitic sequence below the Badshot limestone. The uppermost quartzite of the Hamill group is a light-grey to brown blocky rock containing visible rounded white and opalescent quartz grains in a calcareous cement. On the Bannockburn property this quartzite contains galena and is known as the Shelagh vein. It is as much as 40 feet thick. White finely crystalline limestone which weathers to a cream colour overlies the quartzite. This limestone, which contains the Bannockburn vein, varies greatly in thickness and is commonly more than 100 feet thick.

Near the showings the rocks dip steeply to the northeast and form a tight overturned anticline with low plunge. The axial plane dips steeply to the northeast and lies between the Shelagh and the Bannockburn veins.

see Card 2 ....

Associated minerals or products of value - **Zinc, silver.**

HISTORY OF EXPLORATION AND DEVELOPMENT

The property is located between 5,500 and 6,650 feet elevations at the head of Hall Creek, some 11 miles northeast of the southerly end of Trout Lake. The claims straddle the creek draining the northerly slope of Mount Abbot.

Early activity was confined to showings of high grade galena in limestone called the Bannockburn vein. A second series of showings which constitute the Shelagh vein are about 600 feet to the southwest and for the most part several hundred feet above the Bannockburn vein. The Shelagh vein, though discovered many years ago, received little attention until the 1950's.

The first recorded activity on the Bannockburn showings was in 1897 when stripping and trenching was reported. The group comprised 7 claims, the Bannockburn, Silver Bottom, Silver Reef, Iron Mask, Buckeye, Fossil, and Evergreen (Lots 4450-4456 respectively), which were Crown-granted to E.H. Thomlinson and associates in 1900. Development work to that date included a 110 foot adit and a 33 foot shaft.

Bannockburn Mines, Limited was incorporated in December 1904 but details of company activity are lacking. By 1909 the underground workings included the crosscut adit, now driven southwesterly for 176 feet. At 86 feet from the portal a fault was encountered and drifted on for 118 feet in a southeasterly direction. At the face a crosscut was driven 18 feet southwesterly. The adit, driven 100 feet below the surface showings, did not encounter mineralization like that on surface.

In 1916 the property was optioned to St. Paul Minnesota interests and some surface work was reported late in the year. In 1919 the crosscut adit was extended in search for the limestone-schist contact. The property was owned in 1920 by Alex Smith of Kaslo.

The Superior group, comprising the Nelson, Superior, and Magnolia claims (Lots 12848-12850 respectively) are located adjacent to and in part inbetween claims of the Bannockburn group. The Superior claim covers the southeasterly extension of the Bannockburn vein. The Superior group was owned in 1917 by the Brown Bros., the original owners. An option on the property was given to Messrs. Conaway and Birch, of California and development work began in the fall of 1917. The workings comprise 3 adits, the lowest, at about 6,400

see Card 2 ....

HISTORY OF PRODUCTION

REFERENCES

Reports of Minister of Mines, British Columbia:  
 1897, p. 552; 1898, p. 1072; 1899, p. 685; 1900,  
 pp. 850, 981; 1904, p. 204; 1909, p. 110; 1916,  
 p. 195; 1918, pp. 164, 165; 1919, p. 122; 1920,  
 p. 121; 1955, p. 67; 1957, p. 59; 1958, p. 50;  
 1959, p. 70; 1960, p. 78 + .

Gunning, H.C.; Lardeau Map-Area, British Columbia;  
 Memoir 161, pp. 77, 78, Geol. Surv. of Canada, 1930.

Brock, R.W.; The Lardeau District, British Columbia;  
 Summary Report 1907, p. 87, Geol. Surv. of Canada.

Exploration in British Columbia; British Columbia Dept.  
 of Mines: 1978, p. E 82.

McIntyre, J.F.; Summary Engineering Report, Wagner  
 Project, 5/08/85, in Mikado Resources Ltd, Prospectus,  
 7/08/85.

Mineral Policy Sector; Corporation Files: "Bannockburn  
 Resources Ltd"; "Mikado Resources Ltd".

George Cross News Letters: 1985, Nos. 174, 180.

MAP REFERENCES

Map 235 A, Lardeau Area, (Geol.), Sc. 1":4 miles - accomp.  
 Memoir 161.  
 Mineral Deposits, Lardeau West-Half, Sc. 1:125,000, 1976,  
 Geol. Surv. of Canada, Open File 464.

#Map 82 K/11 , Trout Lake, (Topo.), Sc. 1:50,000.

REMARKS

Comp./Rev. By	DMacR	DMacR					
Date	2-78	11-85					

PRODUCT

LEAD

PROVINCE OR TERRITORY British Columbia

N.T.S. AREA 82 K/11

Card 2 -  
REF. PB 5

NAME OF PROPERTY

BANNOCKBURN, SUPERIOR

## DESCRIPTION OF DEPOSIT (continued)

The Bannockburn vein consists of lenses of massive galena with more or less sphalerite, pyrite, and minor chalcopyrite in limestone. At least three lenses are exposed in old trenches and in a shaft. The lenses are one above the other and are up to a few feet wide and a few feet high. They appear to plunge at a low angle to the southeast and have been found in the old workings a few hundred feet along the plunge. The suggestion obtained from surface exposures of the sulphide lenses is that they are pencil-like replacements of the limestone that have formed at intersections of relatively gently dipping beds and a steeply dipping cleavage.

The Shelagh vein contains very fine-grained sulphides, mainly galena, disseminated in calcareous quartzite. Minor pyrite and sphalerite are present, and small amounts of chalcopyrite and tetrahedrite are reported. Although most of the galena is disseminated, some relatively coarse galena is contained in quartz veinlets within the quartzite. Pyrite grains are locally rusty, but in general the mineralized zone is not marked by a conspicuous gossan. The mineralized quartzite is exposed at intervals for about 3,500 feet along the strike. Most commonly it is 4 to 10 feet thick, and at one place is as much as 40 feet thick. Samples taken by the writer indicate an average grade across the 40-foot width of: Gold, nil; silver, 0.5 oz. per ton; lead, 4.02 per cent; zinc, 1.3 per cent. About 1,000 feet to the southeast where the mineralized quartzite is 10 feet thick, a sample assayed: Gold, nil; silver, 0.03 oz. per ton; lead, 1.97 per cent; and zinc, 0.2 per cent. A few hundred feet farther to the southeast the mineralized zone assayed: Gold, nil; silver, 1.1 oz. per ton; lead, 5.59 per cent; and zinc, 0.5 per cent, across a width of 12 feet. Three holes were drilled by the Sheep Creek company in 1960 to intersect the mineralized quartzite a few hundred feet below the outcrop. One hole is reported to have encountered mineralization like that on surface. Northwest of Hall Creek, more than a mile from the showings on the Bannockburn property, similar mineralization is found in the same quartzite near the crest and down the southwest limb of the same anticline found on the property. Exposures in Hall Creek suggest that mineralization becomes scattered or dies out down the dip of the quartzite.

continued reverse of Card 2 ...

## HISTORY OF EXPLORATION AND DEVELOPMENT (continued)

feet elevation, was driven 192 feet, entirely in rubble. The middle one, about 100 feet above, is said to have encountered mineralization 100 feet from the portal. The upper one was driven 45 feet, intersecting a 5 foot width of low grade mineralized limestone.

Subsequent history is uncertain. Sheep Creek Mines Limited optioned the nearby Wagner group of claims in 1951. Agent J. Gallo of Howser optioned the Bannockburn group to The Granby Consolidated Mining, Smelting and Power Company, Limited in 1954. Road building and preliminary sampling was carried out. During 1955 the company tested the Shelagh vein by 12 packsack diamond drill holes 50 feet deep at close intervals along the strike. In addition 2 holes were drilled to test the Bannockburn vein near the old adit. The option was given up at the end of the year.

The Shelagh vein is reported to extend across the Bannockburn, Buckeye, Silver Bottom and Superior Crown-grants. However, Sheep Creek Mines Limited apparently owned the Shelagh group, variously reported as comprising 5 located claims or 5 Crown-granted claims, from about 1954. During 1957 The Bunker Hill Company, of Kellogg, Idaho, held an option on the Bannockburn group from J. Gallo and on adjacent recorded claims owned by Sheep Creek. Geological mapping was reported. Some surface stripping was reported in 1958.

In 1960 the Bannockburn group was reported to comprise two groups of Crown-granted claims, one owned by J. Gallo, and the other by Sheep Creek Mines Limited. During the year the company drilled 1,049 feet in 4 holes, one to intersect the Bannockburn vein and 3 to explore the Shelagh vein.

The property was owned by J.A.C. Ross & associates in 1977 and under option to S.E.R.E.M. Ltd. Work by the company included 571 metres of diamond drilling in 11 holes, in part on the Crown-grants and on the Ban 1 claim, located by the company to the northwest of the Buckeye claim. The company estimated 1,252 tons per vertical foot in a zone with a strike length of 3,400', average width of 11.5' and average grade of 6.2% combined PB-ZN and 0.7 oz/t Ag (J.F.McIntyre, 1985, p. 19). Ross and associates incorporated Bannockburn Resources Ltd in 1981. Reserves were listed as 2,700,000 tonnes at 4.0% combined Pb-ZN (B.C. Dept. of Mines, Reserves Map, 1984).

p.t.o. ....

#### DESCRIPTION OF DEPOSIT (continued)

In the Shelagh vein the sulphides have formed by replacement of the carbonate cement between the quartz grains in the quartzite. Replacement is thought to have been controlled by the structure. Dragfolds, locally with sheared limbs, are common near the mineralized quartzite. They have a low plunge and a shape that suggests they have not formed by interbed slippage during the formation of the large anticline, but are superimposed on the anticline. Probably these dragfolds and related shears on the southwest limb and near the crest of the anticline have provided a favourable structure for mineralization, and it is suggested that the long axis of the deposit has a low plunge parallel to the plunge of the dragfolds." (Fyles, J.T., Report of Minister of Mines, 1960).

#### HISTORY OF EXPLORATION AND DEVELOPMENT (continued)

Turner Energy & Resources Ltd and Mikado Resources Ltd, joint venture operators of the Wagner property (82 K/11, PB 6), acquired an option on the Bannockburn in 1985.